DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453 (707) 649-5493



Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 69.28

WELDING INSPECTION REPORT

Resident Engineer: Pursell, Gary **Report No:** WIR-012086

Address: 333 Burma Road **Date Inspected:** 18-Feb-2010

City: Oakland, CA 94607

OSM Arrival Time: 700 **Project Name:** SAS Superstructure **OSM Departure Time:** 1900 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

CWI Name: CWI Present: Yes Li Yang No **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A N/A **Electrode to specification:** Yes No Weld Procedures Followed: Yes No N/A N/A **Qualified Welders:** Yes No **Verified Joint Fit-up:** Yes No N/A N/A Yes N/A **Approved Drawings:** Yes No **Approved WPS:** No Yes No N/A **Delayed / Cancelled:**

34-0006 **Bridge No: Component:** OBG

Summary of Items Observed:

On this day CALTRANS OSM Quality Assurance Inspector (QA) Shrikant Utekar was present during the times noted above for observations relative to the fabrication of the SAS Superstructure being performed by Zhenhua Port Machinery Company (ZPMC) at Changxing Island in Shanghai, China. QA observed and/or found the following:

TRIAL ASSEMBLY YARD

ULTRASONIC INSPECTION

American Bridge Fluor (ABF) request number: 02162010-1.

This QA Inspector performed Ultrasonic Testing (UT) on approximately 10% of OBG components previously accepted by ZPMC ultrasonic technicians in accordance with AWS D1.5-2002, section 6, table 6.3 and Detection of Transverse Planar Discontinuities with Significant Flaw Height Dimension Procedure. Rejectable indications were found.

Weld identification numbers were

SEG0278-031 (OBG 6AW, B.P to S.P-W3)

This QA Inspector performed conventional UT (Ultrasonic Testing) in conjunction with ABF UT department for detection of planar transverse indication.

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For more information refer the ABF report dated on 02/17/2010

ULTRASONIC INSPECTION

American Bridge Fluor (ABF) request number: 02182010-2.

This QA Inspector performed Ultrasonic Testing (UT) on approximately 10% of OBG components previously accepted by ZPMC ultrasonic technicians in accordance with AWS D1.5-2002, section 6, table 6.3 and Detection of Transverse Planar Discontinuities with Significant Flaw Height Dimension Procedure. Rejectable indications were found.

Weld identification numbers were

OBW6C-004 (OBG 6BW/6CW- E7/E8)

This QA Inspector performed conventional UT (Ultrasonic Testing) in conjunction with ABF UT department for detection of planar transverse indication.

For more information refer the ABF/CT report dated on 02/18/2010

MAGNETIC PARTICLE INSPECTION

OBG SEGMENT 6BW-6CW

This QA Inspector Witnessed ABF personal performing Magnetic particle Testing (MT) on side panel splice weld between OBG segment 6BW and 6CW (cross beam side) weld are identified as OBW6C-004. American Bridge Fluor (ABF) request number was 02182010-2.

Linear Indications were observed during MT

For more information refer the ABF/CT report dated on 02/18/2010

This QA Inspector randomly observed the following work in progress.

OBG SEGMENT 6CW

This Quality Assurance (QA) Inspector observed ZPMC qualified welder 037743 performing Shielded Metal Arc Welding process for weld SEG031F-008 located on PCMK weld between longitudinal diaphragm to floor beam at PP44 cross beam side. ZPMC QC Mr. Li Yang monitoring this welding. The welding variables recorded by QC appeared to comply with the WPS-345-SMAW-3G (3F) -FCM-Repair-1. Critical weld repair report identified as B-WR10630.

OBG SEGMENT 6AW

This Quality Assurance (QA) Inspector observed ZPMC qualified welder 037743 performing Shielded Metal Arc Welding process for weld SEG027F-008 located on PCMK weld between longitudinal diaphragm top flange to floor beam at PP40 cross beam side. ZPMC QC Mr. Li Yang monitoring this welding. The welding variables

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recorded by QC appeared to comply with the WPS-345-SMAW-1G (1F) -FCM-Repair-1. Critical weld repair report identified as B-WR1067.

OBG SEGMENT 7AW

This QA Inspector observed ABF QA performing Ultrasonic Testing (UT) on weld between side panel and bottom panel counter weight side.

Unless otherwise noted, all work observed on this dated appeared to generally comply with applicable contract documents.





Summary of Conversations:

No relevant conversations.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang, +(86) 1500 042 2372, who represents the Office of Structural Materials for your project.

Inspected By:	Utekar,Shrikant	Quality Assurance Inspector
Reviewed By:	Dawson,Paul	QA Reviewer